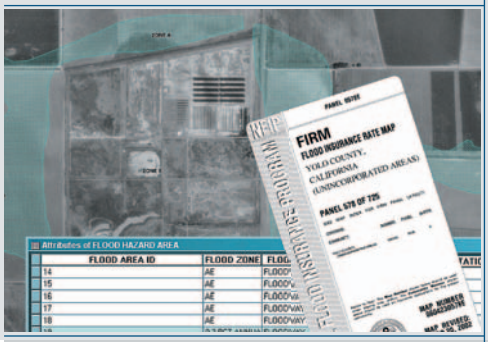
MULTI-HAZARD FLOOD MAP MODERNIZATION



Digital Flood Maps

FROM Q3 FLOOD DATA TO DFIRMS

FEMA produces two flood map products using Geographic Information System (GIS) technology. The first product FEMA created is called **digital Q3 Flood Data**. As technology advanced, FEMA then created **Digital Flood Insurance Rate Maps (DFIRMs)**. As part of Map Modernization, FEMA will only update or produce DFIRMs.

GIS allows users to view information in a graphical format and add or remove layers of data. A GIS is a computer based system for the capture, storage, retrieval, manipulation, analysis, and display of geographic information. This information can be map data or non graphic attribute data that provides descriptive information about the features on the map. For more information on GIS, please visit FEMA's GIS Web site at www.gismaps.fema.gov/index.shtm.

The digital Q3 Flood Data product is a digital representation of certain features of Flood Insurance Rate Maps (FIRMs) that is intended for use with desktop mapping and GIS technology. FEMA produces the digital Q3 Flood Data in three data formats that can be used with desktop mapping and GIS software, including ArcInfo, Digital Line Graph, and MapInfo. The digital Q3 Flood Data provide basic guidance and a general indication of the location of Special Flood Hazard Areas (SFHAs), the areas subject to inundation by the base (1-percent-annual-chance, or 100-year) flood.

The digital Q3 Flood Data do not replace the effective FIRM. FEMA designed the product to support planning activities, some Community Rating System activities, insurance marketing, and portfolio reviews. Base Flood Elevations are not included, so the application of the Q3 Flood Data files for engineering analysis, particularly for site design, or rating insurance policies for properties located in an SFHA is limited. The digital Q3 Flood Data should be considered an advisory tool for general hazard awareness, education, and floodplain management.

Digital Q3 Flood Data are available for many counties in the United States (approximately 1,300 of over 3,100 counties). It is important to note that the data in Q3 Flood Data Files were created using the effective FIRMs at that time. Thus, the data file does not include recent mappable Letters of Map Change or changes made by FEMA by physical updates to the FIRMs.

If you would like more information about the digital Q3 Flood Data product, please visit the FEMA Map Service Center Web site at msc.fema.gov.

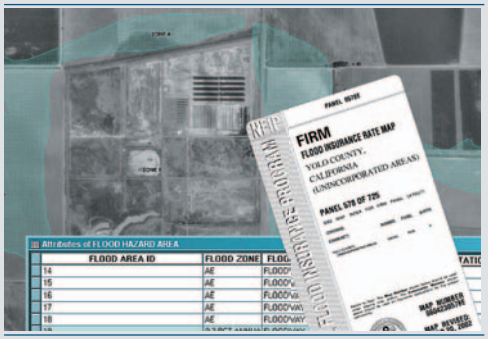
FEMA is replacing the digital Q3 Flood Data with DFIRMs that have links to databases containing the engineering back-up material used to develop the map (e.g., hydrologic and hydraulic models, flood profiles, floodway data table, Digital Elevation Models, and structure specific

For more information on DFIRMs, please visit FEMA's DFIRM Homepage at www.fema.gov/fhm/dfm_dfhm.shtm.

FEMA

AUGUST 2004

MULTI-HAZARD FLOOD MAP MODERNIZATION



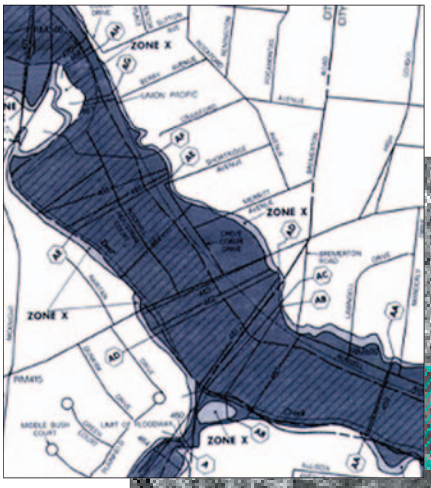
Digital Flood Maps

FROM Q3 FLOOD DATA TO DFIRMS

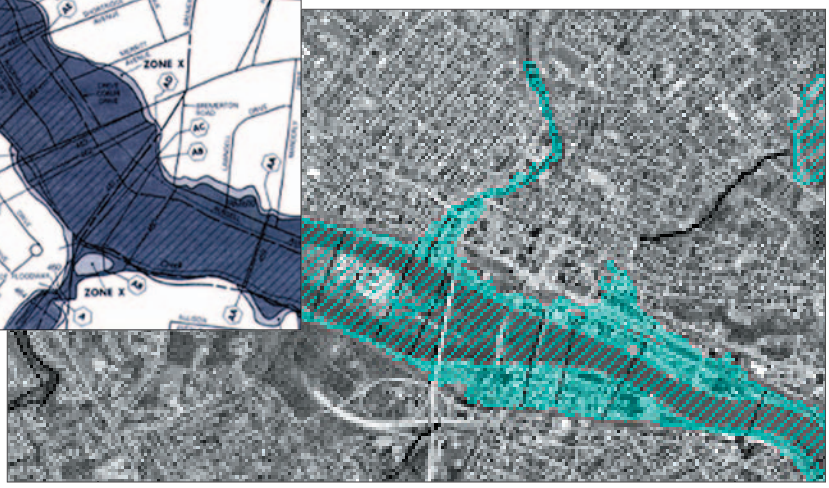
data, such as digital elevation certificates and digital photographs of bridges and culverts). Unlike the Q3 data, DFIRMs will be of the same spatial precision and accuracy of the paper maps.

DFIRMs are comprised of all digital data required to create the hardcopy FIRM. This includes base map information, graphics, text, shading, and other geographic data required to create the final hardcopy FIRM product. A goal of Map Modernization is to create DFIRMs for all communities participating in the National Flood Insurance Program.

Updated DFIRMs will become the platform for identifying not just flood hazards, but multihazards. These maps will feed a a nationwide, cutting edge GIS infrastructure called Multihazard Information Platform (MIP) that will allow management of a dynamic array of data, applications, and processes. Users will access this system through the Internet. The MIP, located online at hazards.fema.gov, will help local officials make critical decisions regarding asset management, economic development, planning, floodplain management, and zoning and building code enforcement.



THE FUTURE OF FLOOD MAPS



AUGUST 2004

FEMA